

Global Perspectives and Strategies for Education about Standardization – European Perspective

ICES Workshop, February 21-22, 2008, Gaithersburg

Overview of Education in Standardization at German Universities and Colleges

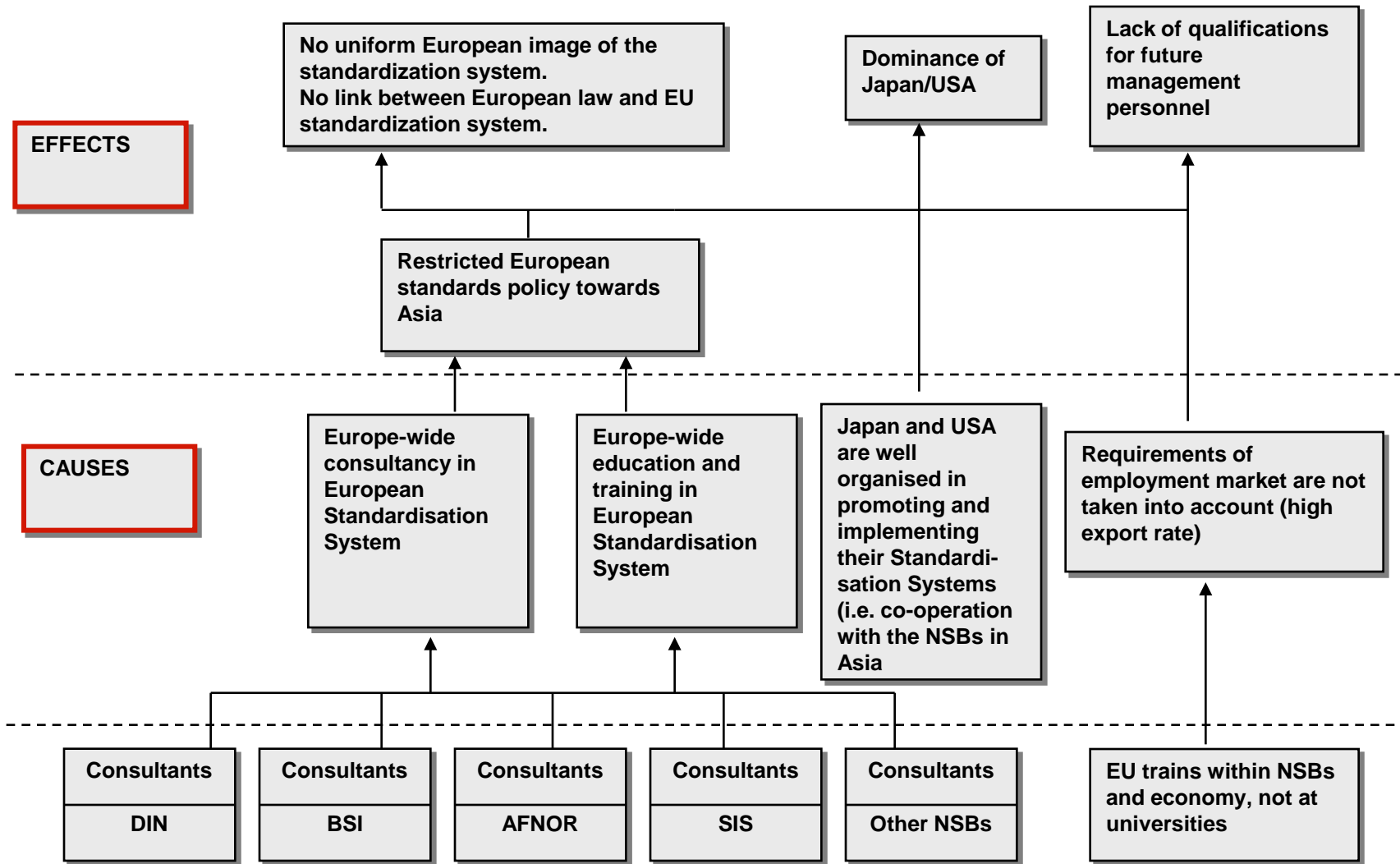
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- 1. Problem Analysis**
- 2. Questionnaire on Standards Education**
- 3. Academic Education on Standardization**
- 4. Further Education on Standardization**
- 5. Vision of Education**

1. PROBLEM ANALYSIS



2. QUESTIONNAIRE ON STANDARDS EDUCATION

Evaluation: January, February 2008

- Of 360 addressees (230 SIIT mailing list members and 130 EURAS mailing list members) 27 answered questionnaire.
- Of 27 responses **10 came from Germany**, 3 from the Netherlands, 1 from France, 1 from Italy, 4 from Greece, 1 from Sweden, 1 from UK, 3 from the USA , 1 from Canada and 1 from India.
- 23 responses came from universities, 1 from a Ministry, 3 from other institutions, none from colleges or related institutions.

SIIT – mailinglist Dr. Kai Jakobs

3. ACADEMIC EDUCATION ON STANDARDISATION

Evaluation (continued): **Germany**

Does your institution teach standardization ?

10 came from Germany

Answers:

- 7 Yes
- 3 No

3. ACADEMIC EDUCATION ON STANDARDIZATION

Results of Questionnaire – An Overview - Lecture/Course

- Master Course – Standard diffusion, standardisation governance, standardisation in SMEs, standardisation in networks.
Applications: E-business standards, Web Services and SOA.
Every winter semester, 4 hrs/week; 40-50 students.
- Standardization part of Innovation Economics and Policy courses
-strategic aspects of standardisation, 2 hrs/week, 20 students
- Law of technics – Standardisation - 6 hrs/week, 100 students
- Course on E-Government - technical and organisational interoperability - standardisation
5 hrs/week, 20 students
- Development of IT Standards and E-Business Applications, Electronic Business, 4 hrs/week, 20 students
- Course option in Master degree – Standardization in Companies and Markets. Two trimester 2hrs/week; 10 – 15 students

3. ACADEMIC EDUCATION ON STANDARDIZATION

In academia:

Example: DFG wants to set up a research network in standardization in Germany in February, 2008

- 24 professors have expressed an interest to participate
- 9 answered my questionnaire
- 7 hold lectures on standardization

Standardization research more important than standardization education

DFG - The Deutsche Forschungsgemeinschaft (German Research Foundation) is the central, self-governing research funding organisation that promotes research at universities and other publicly financed research institutions in Germany.

4. FURTHER EDUCATION ON STANDARDIZATION

NSB (DIN):

- Carries out further education activities in the current budget year
- Target market for activities: industry and commerce, government organizations, continuous professional development (CPD),
- The further education activities carried out include: Web site information, publication, research and certified standardization course, for industry and commerce

(Report on a Survey of other NSBs Educational Activities, BSI 2001)

Further Education and German SBs:

A lucrative business

- German SBs limited support of education initiatives in standardization at academic level in the past
- Due to recent (web-based) dynamics in standardization education, this approach not viable anymore

→ New approach to standardization education required

4. FURTHER EDUCATION ON STANDARDIZATION

Other providers of training in standardization:

GTZ (Gesellschaft für Technische Zusammenarbeit)

- International cooperation enterprise for sustainable development
- Worldwide operations
- Owned by German Federal Government

PTB (Physikalische Technische Bundesanstalt)

- National metrology institute providing scientific and technical services
- Measures with highest accuracy and reliability
- Metrology as core competence
- Owned by German Federal Government

TÜV (Technischer Überwachungsverein)

- International service group
- Operating in INDUSTRY, MOBILITY and PEOPLE business segments
- Engaged in optimizing technology, systems and know-how
- Worldwide operations

Further education worldwide in STANDARDIZATION

Online-curriculum “Standardization in Companies and Markets” set up in 2007:

Objectives

- To deliver comprehensive, didactically enhanced and up to date knowledge of standardization to all target groups
- To save time and money by self-qualification in blended-learning course
- To ensure personalized tuition through modular structure



www.asia-link-standardization.de

www.pro-norm.de

5. VISION of EDUCATION

Standardization textbooks & Reference materials

With:

- **interdisciplinary content**
- **Law**
- **Information technology**
- **E-business**
- **Economic strategies**
- **etc**

5. VISION of EDUCATION

A sustainable e-learning approach in standardization education needs

- a sound financial basis
- high level of technical infrastructure
- ongoing commitment of all parties involved
- constant updating of contents

HOW SHOULD A VIABLE BUSINESS MODEL BE SET UP?

Thank you very much for your attention!

Please feel free to ask questions and make

comments!

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